Package „Requirement Management"

History: Release 9.1.0_1.4, 20100427, Andrea Herrmann, Initial Release

Description

This package adds a solution for requirements management on top of "Aras Innovator Core & Solutions".

This Requirement management package provides the ability to handle your requirements within ARAS Innovator and it allows linking the requirement structures with the product structures. In this way specific requirements can be associated with individual parts, assemblies and modules.

Requirements have their own life cycle status, release and revision control and are a vital enrichment to product specific data. A PLM System is a very good place to manage them.

The requirement management delivered with this package is conceptually based on leading requirement management systems (like. IBM Rational DOORS®)

Following features are provided:
- Creation of requirements
- Classification of requirements
- Building up a requirement structure
- Setting of cross references
- Adding files to requirements
- Attach requirements to parts
- Reporting (structure report, priority report, risk report)
- Requirement Lifecycle
- Requirement Revisions

This package adds a new entry in the TOC:
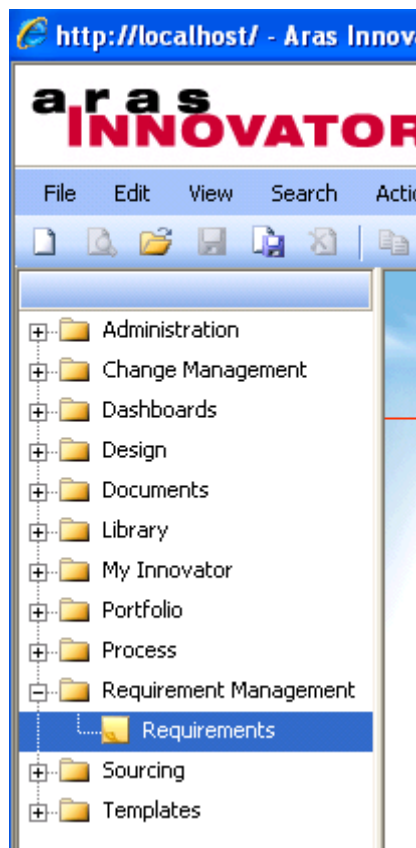
Handling of Requirements
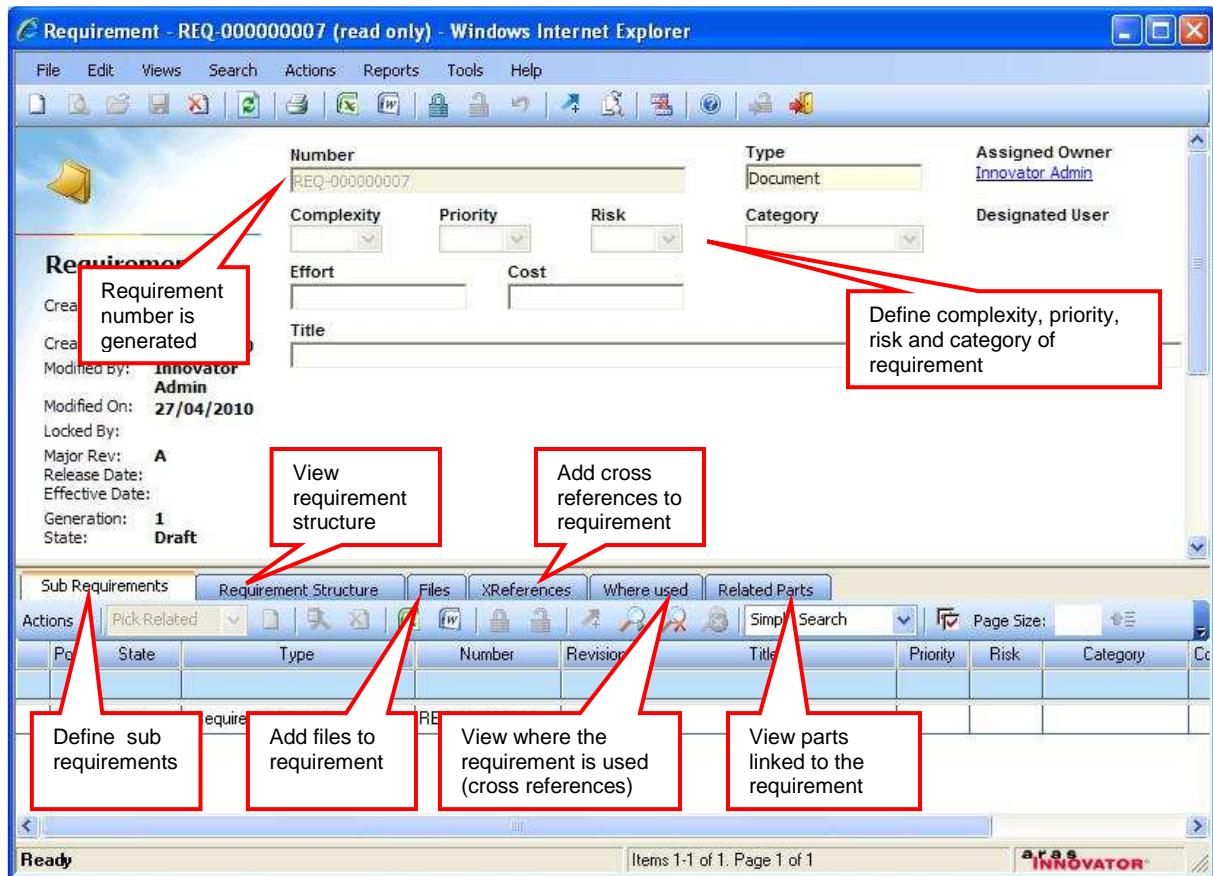
The handling of requirements is quite similar to the document handling:

Create a requirement

From TOC select Requirements Management – Requirements
Right-click on Requirements, and choose New Requirement... from the popup menu.

- **Number** - the number of the requirement
- **Complexity** – complexity grade
- **Priority** - priority
- **Risk** – risk assessment
- **Category** – category allocation
- **Effort** – enter estimated effort for this requirement
- **Cost** – enter estimated cost for this requirement
- **Title** – title of requirement
- **Text** – enter requirement text (this property appears only for requirements of type text)

- **Type** – select the classification of the requirement. Expand the list of available choices by clicking the + icon, next to Requirement:

```
Requirement  ⊟
    ├─ Document
    └─ Object  ⊟
            ├─ Structure
            ├─ Text
            ├─ Picture
            └─ Other
```
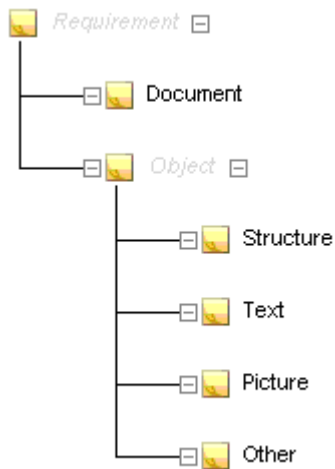
- **Assigned Owner** - is responsible for the design or the content of the requirement, usually an engineer and a member of the Component Engineering group Identity

- **Designated User** - is responsible for managing, using, and reviewing the part. See the Assigned Creator steps of entering data into this type of field.

Tabs:

Sub Requirements
Create a requirement hierarchy (similar to the part's BoM structure) by adding child requirements to a requirement (one level)

	Posit	State	Type	Number	Revision	Title	Priority	Risk	Category
	128	Preliminary	/Requirement/Document	REQ-000000001	A	Test1	Medium	Medium	Security and Safety
🔒	256	Preliminary	/Requirement/Document	REQ-000000002	A	Test2	Critical	High	Interface

Requirement Structure
View the requirement structure (multi level). Navigation to child requirements is supported with right-mouse-menus and a toolbar button.

Sort Order	Number	Classification	Title
128	REQ-000000001	/Requirement/Document	Test1
128	REQ-000000004	/Requirement/Object/Text	Test 5
256	REQ-000000002	/Requirement/Document	Test2

Files
Add files to a requirement. A requirement may have more than one file attached to it.

	File Name	File Type [...]	Comments
	usb 64 64.jpg	JPG	
	test.html	HTML	

XReferences
Add cross references to requirement. In addition to the requirement structure cross references from a requirement to other requirements can be defined

	State	Type	Number	Revision	Title	Priority	Risk	Category	Complex
🔒	Preliminary	/Requirement/Object/Text	REQ-000000004	A	Test 5	Low	Low	Operations	Low

Where used
View cross references from other requirements to this requirement (no edit functionality)

Number	Classification	Title	Status	Rev
REQ-000000003	/Requirement/Object/Structure	Test3	Preliminary	A

Related Parts
View the parts which are linked to this requirement (no edit functionality)

Number	Status	Name		Rev	Owner	Release Date	Classification
⚙ 000001	Preliminary	test	△	A		--	/Part/Material

The requirements package enhances the parts item type. There will be also new relationship parts –> requirements. The new tab "Requirements" on the parts form allows to link requirements to a part:
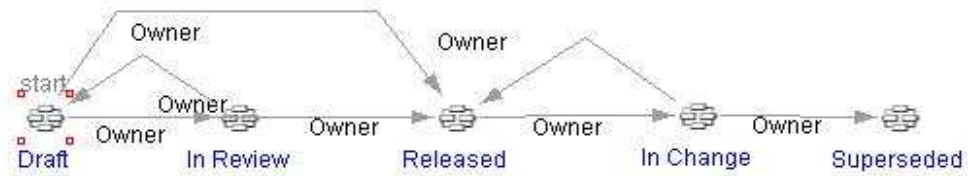
Reports

New reports in the reports menu:

- Requirement Priority Report
  List all requirements ordered by priority
- Requirement Risk Report
  List all requirements ordered by risk
- Requirement Structure Report
  For a selected requirement the hierarchical requirement structure is listed

Requirement Lifecycle

Promotions to next Life Cycle states are done manually by the Owner of the requirement. When a new revision of a requirement is started the Life Cycle for this revision is reset to the "start". To release this new revision the status must be promoted again.
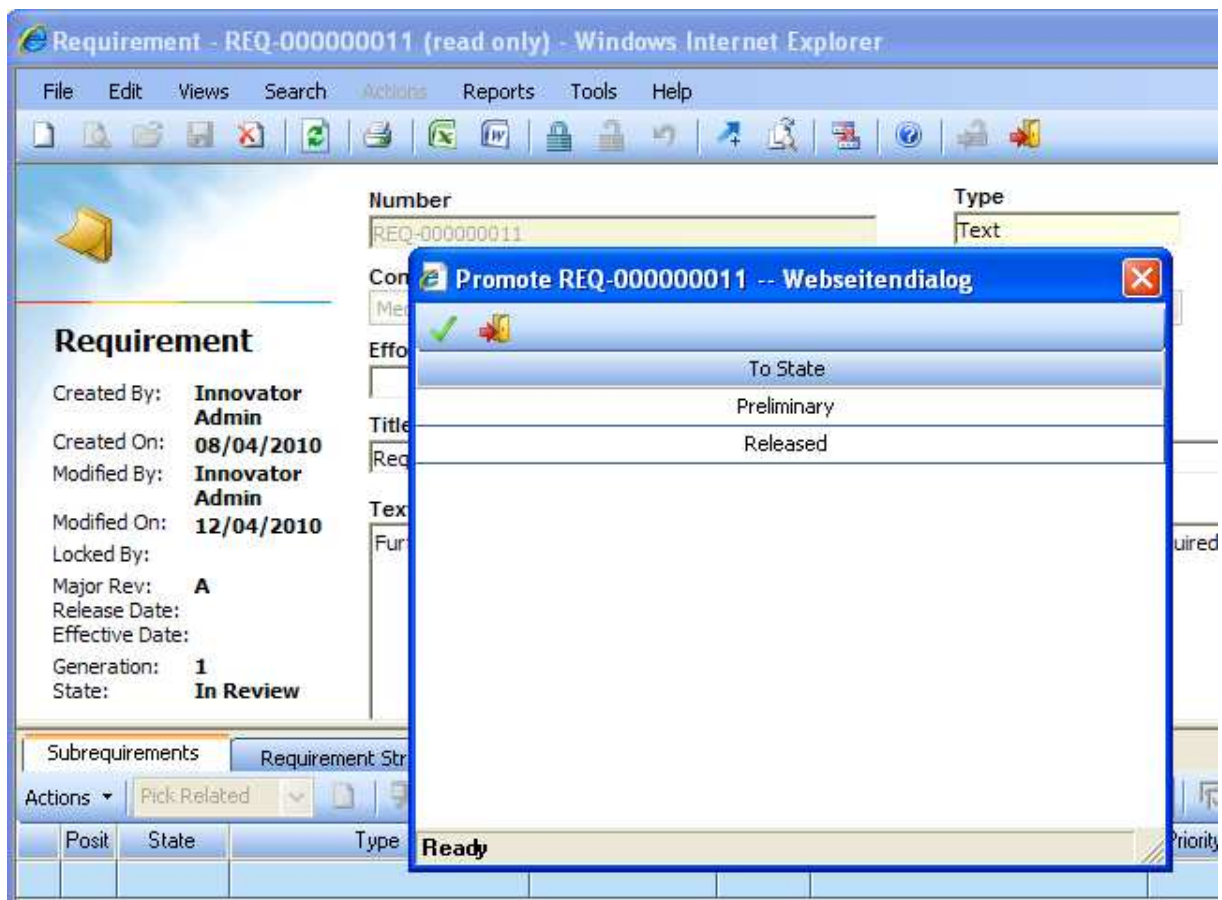
Requirement Revisions

A requirement in status "Released" cannot be edited and modified. To make update and/or modifications to meta data or the attached files or other relationships a new Revision of this requirement must be started. This is also done manually by the owner of the requirement.

The Menu-Action-Start-Create next Requirement Revision will do this. If the requirement is not in status "Released" or you are not member of the "Owner-group", an error message will be displayed.

The next revision can be also created from the grid: select a requirement and open the context menu (mouse right-click):
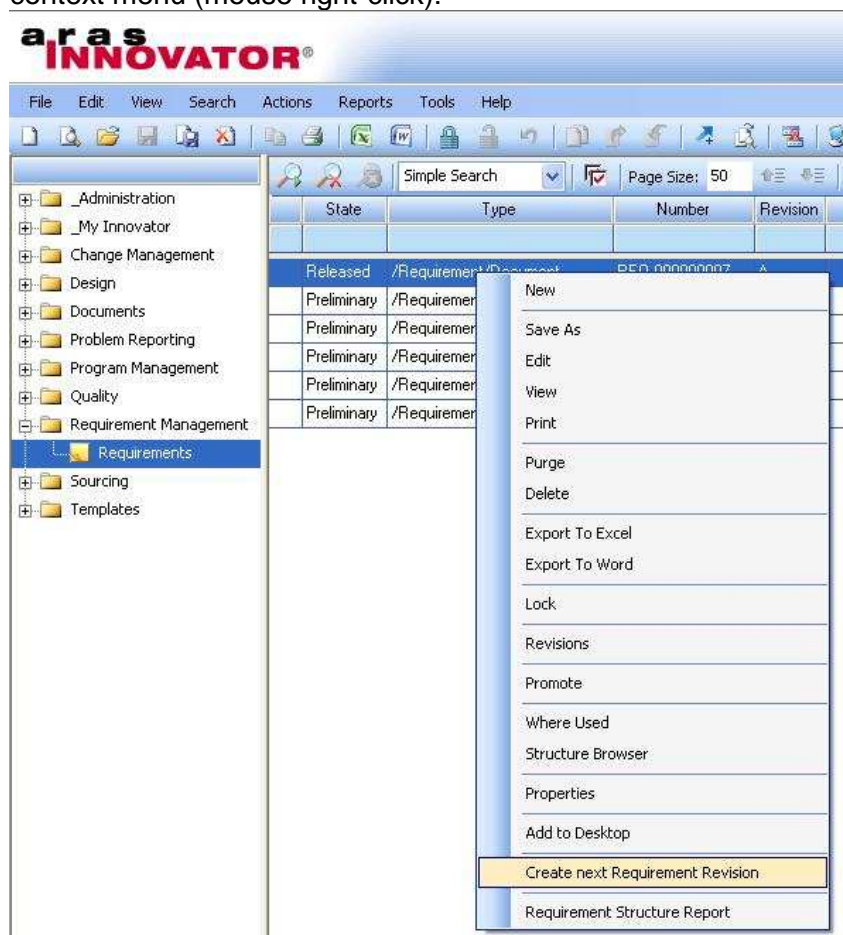
Installation

The requirements.zip contains the folder "imports".
Unpack this folder from the requirements.zip

For installation use the „PackageImportExportUtilities". Login to your database (as admin) and then select the 'imports.mf' manifest file from where you unpacked the zip file. Select the checkbox for the 'usb.solution.requirements' package and start the import by clicking on the icon in the top left corner: